

REMARKS

Original claims 1-25 have been cancelled and replaced with new claims 26-50. New claims 26-52 are fully supported throughout the original disclosure. Thus, applicants submit that no new matter has been added. However, if the Examiner should disagree, applicants will provide specific support for the amendments in response to his objection.

The present invention, as now claimed is drawn to an expression system which is functional in a plant, the system including an inducible promoter sequence responsive to the presence or absence of an exogenous chemical inducer and either a gene encoding a repressor protein under control of the inducible promoter or a gene encoding an inhibitor of a disrupter gene, the disrupter gene encoding a protein disrupter of a plant characteristic that is either essential for growth or is a desired characteristic resulting from gene insertion, the effect of the system not only acting on the biosynthesis of viable pollen. In not acting only on the biosynthesis of viable pollen and in disrupting another characteristic of a plant, such as a characteristic that is essential for growth, beyond the production of viable pollen, the present invention necessarily acts to prevent or alter the growth or development of established plants or seeds. By the present invention, it is now possible to control volunteers or premature sprouting. The invention as now defined in the claims is clearly not directed to producing otherwise healthy, unaffected plants which are simply unable to produce viable pollen. The present invention, as now claimed, requires that the plant itself, not just the viability of the

pollen, is effected by the expression system; that is, the plant itself is inhibited, killed or altered as a result of the presence or absence of controlling chemical.

The whole of the specification fully supports the new claims as filed. As taught in the specification, it is the discovery of the Applicants, that an expression system can now be provided which is responsive to an exogenous chemical inducer such that the chemical inducer can by it presence or absence cause the expression system to prevent or alter the growth or a characteristic of an established plant, that characteristic not being limited to the production of viable pollen. Such an expression system has not before been described in the prior art.

Further, the specification at pages 14-15 provides a description of other disrupter genes (e.g., those named in WO 90/08831, barnase/Ti ribonuclease, and the recombinases Ac, FLP and Cre) which may be used in the claimed invention. In particular, a disrupter protein which encodes a cytotoxin is described in claim 3 and a recombinase is described in claims 4 and 14-16. Applicants have therefore provided a novel expression system and also have provided an enabling disclosure for the use of other genes which may comprise the claimed invention.

Accordingly, the Applicants assert that the present invention, as now claimed, is in condition for allowance. Early and favorable consideration of the present application is

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respectfully requested. The Examiner is invited to contact the undersigned if further information is needed.

Respectfully submitted,

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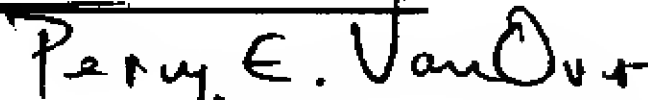
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